

| 31/4| | 33/8| | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° | 10° |

SECTION THRU RAIL ELEMENT

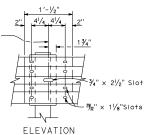
-6" x 8" x 1'-2" notched wood block or notched

plastic block. See Notes 3 and 13.

<u>METAL BEAM GUARD RAILING WITH STEEL POSTS</u> AND NOTCHED WOOD OR NOTCHED RECYCLED PLASTIC BLOCKS

© Rail Splice and slot for %" Ø 2" button head bolt to connect rail to post and block

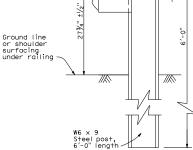
N



RAIL ELEMENT SPLICE DETAIL

- a) Connect the over lapped end of the rail elements with $\%'' \not o \times 1\%''$ button head oval shoulder splice bolts inserted into the $\%''' \times 1\%''$ slots and bolted together with $\%'' \not o$ recessed hex nuts. Recess of hex nut points toward rail element. A total of 8 bolts and nuts are to be used at each rail splice connection.
- b) The ends of the rail elements are to be overlapped in the direction of traffic (see details).
- c) Where end cap is to be attached to the end of a rail element, a total of 4 of the above described splice bolts and nuts are to be used.

%" Ø Button head bolt with hex nut. Attach rail element to wood block and steel post with bolt on traffic approach side of post web. No washer on rail face for bolted connection to line post.



Top of rail

SECTION A-A
TYPICAL STEEL LINE
POST INSTALLATION
See Note 4

DIST COUNTY ROUTE POST MILES SHEET TOTAL PROJECT NO. SHEETS

PLANS APPROVAL DATE

The Stele of Cultivaria or the officers or completeness of electronic copies of this plan

To get to the Celtrans web site, go to: http://www.dclaggv

NOTES:

- For details of wood post installations, see Standard Plan A77A1.
- For details of standard hardware used to construct guard railing, see Standard Plan A77B1.
- For details of steel posts, notched wood blocks and notched recycled plastic blocks used to construct guard railing, see Standard Plan A77Cz.
- 4. For additional installation details, see Standard Plan A77C3.
- Guard railing post spacing to be 6'-3" center to center, except as otherwise noted.
- For guard railing typical layouts, see the A77E, A77F and A77G Series of Standard Plans.
- 7. For terminal system end treatment details, see the A77L Series of Standard Plans.
- 8. For guard railing end anchor details, see Standard Plans A77H1 and A77I2.
- 9. For details of guard railing transition to bridge railing, see Standard Plan A77J4.
- 10. For additional details of guard railing connection to bridge railings, see Standard Plans A77J1, A77J2 and A77K1.
- 11. For dike positioning and guard railing delineation details, see Standard Plan A77C4.
- 12. Direction of adjacent traffic indicated by
- 13. Notched face of block faces steel post.
- 14. Slotted hole for bolted connection of rail element to block and post. See "Section Thru Rail Element".
- 15. Slotted holes for splice bolts to overlap ends of rail element. See "Section Thru Rail Element".

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

METAL BEAM GUARD RAILING STANDARD RAILING SECTION (STEEL POST WITH NOTCHED WOOD OR NOTCHED RECYCLED PLASTIC BLOCK)

NO SCALE

A77A2